Proceedings of the New York Entomological Society

(Meetings held in Room 129 of the American Museum of Natural History unless otherwise indicated.)

Meeting of January 2, 1973—The Annual Meeting

The meeting was held in Room 129, and Dr. Howard Topoff, President, presided; 10 members and 6 guests were present. The Report of the Nominating Committee, composed of Dr. David Miller, Dr. James Forbes, and Dr. John A. L. Cooke, proposed the following candidates for offices for 1973:

President—Dr. Howard Topoff
Vice President—Fr. Daniel J. Sullivan
Secretary—Dr. Peter Moller
Assistant Secretary—Dr. Charles C. Porter
Treasurer—Dr. Winifred Trakimas
Assistant Treasurer—Ms. Joan DeWind
Trustees: Dr. Lee Herman
Edwin Way Teale

There were no further nominations and the slate of candidates was unanimously elected. Ms. Barbara Paparesta was elected to Active Membership, Mr. Kevin J. McGrath to Student Membership. Dr. Peter Moller was proposed for Active Membership and Mr. James M. Silverman proposed for Student Membership.

PROGRAM. "Cockroach Control by Spray, Dust and Bait Combinations," by Dr. Ayo Gupta of Rutgers University. Dr. Gupta described a team experiment conducted in actual homes, testing comparative effectiveness of control methods in relation to varying sanitary conditions.

JOAN DEWIND, *Ex. Sec.*

Meeting of February 6, 1973

President Howard Topoff presided; 11 members and 3 guests were present. James Silverman, graduate student at City University of New York, whose interest is in the behavior of cockroaches was elected to Student Membership. Dr. Peter Moller, of Hunter College, whose interest is in orientation in spiders and underlying sensory mechanisms, was elected to Active Membership. Joseph Cerreta, of Fordham University, was proposed for Student Membership.

PROGRAM. "Disease and Insect Problems in the Metropolitan New York Area." Dr. P. Pirone, Senior Plant Pathologist, New York Botanical Gardens, discussed the devastating effect of pollution and insect pests upon New York's plant life.

PETER MOLLER, *Sec.*

Meeting of February 20, 1973

President Howard Topoff presided; 12 members and 12 guests were present. Mr. Joseph M. Cerreta, of Fordham University, whose interest is in insect ultrastructure, was elected to

Student Membership. Ms. Iris L. Goldfarb and Ms. Katharine Lawson of City College of New York and Hunter College, respectively, were proposed for Student Membership.

PROGRAM. "The Cyclops Eye of the Dragon Fly" was discussed by Dr. Richard Chappell, Assistant Professor of Biology at Hunter College.

PETER MOLLER, *Sec.*

NEUROPHYSIOLOGY AND DEVELOPMENT OF THE DRAGONFLY MEDIAN OCELLUS

The role and development of the dragonfly median ocellus are discussed in light of recent neurophysiological evidence obtained from intracellular recordings of receptors and post-synaptic units and from electron micrographs of synaptic organization. Behaviorally, dragonflies whose ocelli were occluded in the field flew up to a branch and remained there as long as they were observed (one hour) while those whose compound eyes were occluded flew skyward until they disappeared from sight, indicating possible roles in diurnal behavior and phototaxis. On the basis of neurophysiological recordings and feedback synaptic organization, an additional role as a shadow or motion detector was suggested. A study of the development of a population of 32 nymphs of *Aeschna tuberculifera* revealed that while the presumptive lateral and median ocelli could not be identified prior to the fourth day of the final instar, they could always be found after the eighth day of the final instar. The mean duration of the final instar was 30.4 days (standard deviation of 6.6 days) for a population of 245 dragonflies of the species *Aeschna tuberculifera* and *Anax junius*. The preceding instar (instar –1) had a mean duration of 16.8 days (standard deviation of 3.6 days) for a population of 100 dragonflies. For ten dragonflies reared through instar –2, the mean duration of that instar was 15.1 days. Developmental study suggests the possibility of severing the ocellar nerve prior to emergence in order to obtain denervated adult ocelli for neurophysiological study.

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